

ABSTRACT OF THE DISCLOSURE

A biosensor protein comprising (1) and (2) below:

(1) a modified fluorescent protein which is obtained by
cleaving amino acid sequence of green fluorescent

5 protein or its derivative in the vicinity of a hotspot
amino acid residue which affects the fluorescence

property, and modifying the structure of the green

fluorescent protein or its derivative, and (2) one or
more functional molecules which are capable of

10 transmitting their conformational changes to the
modified fluorescent protein to cause a conformational
change of the modified fluorescent protein, thereby
altering the fluorescence property of the modified
fluorescent protein.